



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2021-0260; FRL-8644-01-R9]

Partial Approval and Partial Disapproval of Air Quality Implementation Plans; California; San Joaquin Valley Serious Area and Section 189(d) Plan for Attainment of the 1997 Annual PM_{2.5} NAAQS

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action to approve in part and disapprove in part portions of state implementation plan (SIP) revisions submitted by California to address Clean Air Act (CAA or “Act”) requirements for the 1997 annual fine particulate matter (PM_{2.5}) national ambient air quality standards (NAAQS or “standards”) in the San Joaquin Valley PM_{2.5} nonattainment area. Specifically, the EPA is approving the 2013 base year emissions inventories in the submitted SIP revision. The EPA is disapproving the attainment demonstration and related elements, including the comprehensive precursor demonstration, five percent annual emissions reductions demonstration, best available control measures (BACM) demonstration, reasonable further progress (RFP) demonstration, quantitative milestones, and contingency measures. The EPA is also disapproving the motor vehicle emissions budgets in the plan as not meeting the requirements of the CAA and EPA regulations.

DATES: This rule is effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-R09-OAR-2021-0260. All documents in the docket are listed on the <https://www.regulations.gov> web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will

be publicly available only in hard copy form. Publicly available docket materials are available through <https://www.regulations.gov>, or please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section for additional availability information. If you need assistance in a language other than English or if you are a person with disabilities who needs a reasonable accommodation at no cost to you, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Ashley Graham, Air Planning Office (ARD-2), EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 972-3877, or by email at graham.ashleyr@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, “we,” “us,” and “our” refer to the EPA.

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I. Summary of Proposed Rule

On July 22, 2021, the EPA proposed to approve in part and disapprove in part portions of SIP revisions submitted by the California Air Resources Board (CARB) to meet CAA requirements for the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley PM_{2.5} nonattainment area.¹ The SIP revisions on which we proposed action are those portions of the “2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards” (“2018 PM_{2.5} Plan”)² and the “San Joaquin Valley Supplement to the 2016 State Strategy for the State Implementation Plan” (“Valley State SIP

¹ 86 FR 38652.

² The San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD or “District”) adopted the 2018 PM_{2.5} Plan on November 15, 2018 and CARB adopted it on January 24, 2019. The 2018 PM_{2.5} Plan includes a revised version of Appendix H submitted by CARB as a technical correction on February 11, 2020.

Strategy”)³ that pertain to the 1997 annual PM_{2.5} NAAQS. CARB submitted the 2018 PM_{2.5} Plan and Valley State SIP Strategy to the EPA as a revision to the California SIP on May 10, 2019. We refer to the portions of these two SIP submissions that pertain to the 1997 annual PM_{2.5} NAAQS collectively as the “SJV PM_{2.5} Plan” or “Plan.” The SJV PM_{2.5} Plan addresses the Serious area and CAA section 189(d) attainment plan requirements for the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley, including the State’s demonstration that the area would attain the 1997 annual PM_{2.5} NAAQS by December 31, 2020.

The EPA proposed to approve the 2013 base year emissions inventories in the SJV PM_{2.5} Plan and proposed to disapprove the attainment demonstration and related elements, including the comprehensive precursor demonstration, five percent annual emissions reductions demonstration, BACM demonstration, RFP demonstration, quantitative milestone demonstration, motor vehicle emissions budgets, and contingency measures. The EPA proposed to disapprove these elements because the San Joaquin Valley area did not attain by the State’s projected attainment date of December 31, 2020.⁴

The EPA also proposed action on amendments to the local air district’s SIP-approved residential wood-burning rule, the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD or “District”) Rule 4901, “Wood Burning Fireplaces and Wood Burning Heaters” (“Rule 4901”), submitted by the State to the EPA on July 19, 2019. These amendments include a contingency measure in section 5.7.3 of the amended rule that the State submitted to address contingency measure requirements for the 1997 annual PM_{2.5} NAAQS. The EPA proposed to disapprove, and to remove from the California SIP, the contingency provision of Rule 4901 (i.e.,

³ CARB adopted the Valley State SIP Strategy on October 25, 2018.

⁴ The EPA’s proposed action was based on our review of preliminary but complete and quality-assured ambient air monitoring data for 2018–2020. For this final action, the EPA has reviewed the final, certified ambient monitoring data. These final certified data values are the same as the values shown in Table 5 of the EPA’s proposal in most instances except for minor differences in 2020 annual means and 2020 design values for the following three sites: Fresno–Pacific (AQS ID: 06-019-5025), Bakersfield–Golden State Highway (AQS ID: 06-029-0010), and Corcoran (AQS ID: 06-031-0004). The final data values support our preliminary conclusion that the San Joaquin Valley area did not attain by the State’s projected attainment date of December 31, 2020. Source: EPA, 2020 AQS Design Value Report, AMP480, accessed September 29, 2021.

section 5.7.3) because this provision does not satisfy CAA requirements for contingency measures and is severable from the remainder of Rule 4901. Our disapproval of section 5.7.3 of Rule 4901 as a contingency measure for the 1997 annual PM_{2.5} NAAQS, and our removal of this provision from the SIP, has no effect on our prior approval of Rule 4901 for purposes of meeting the BACM and most stringent measures requirements for the 2006 PM_{2.5} NAAQS in the San Joaquin Valley,⁵ which remains in effect for all but section 5.7.3 of Rule 4901.

II. Public Comments and EPA Responses

The EPA's proposed action provided a 30-day public comment period that ended on August 23, 2021. We received four sets of comments, including two comment submissions from private citizens,⁶ one comment letter from the SJVUAPCD,⁷ and one comment letter from a coalition of environmental and community organizations (collectively referred to herein as "Earthjustice").⁸ All of the comments are included in the docket for this action. The comment submissions from private citizens generally supported our proposal to disapprove the contingency measures element of the SJV PM_{2.5} Plan. The supportive portions of those comments do not require a response. We respond to the remainder of the comments received on our July 22, 2021 proposed rule in this notice.

A. Comments from SJVUAPCD

Comment A.1: SJVUAPCD states that it supports the EPA's proposal to approve the 2013

⁵ 85 FR 44206 (July 22, 2020) (final approval of Rule 4901) and 85 FR 44192 (July 22, 2020) (determination that Rule 4901 implements BACM and MSM for residential wood burning).

⁶ Comment dated July 30, 2021, from Cherie Yang, to Docket ID No. EPA-R09-OAR-2021-0260, and comment dated August 23, 2021, from Thomas Menz, to Docket ID No. EPA-R09-OAR-2021-0260, with attachment.

⁷ Letter dated August 23, 2021, from Samir Sheikh, Executive Director/Air Pollution Control Officer, SJVUAPCD, to Ashley Graham, EPA Region IX, Subject: "Re: Partial Approval and Partial Disapproval of Air Quality Implementation Plans; California; San Joaquin Valley Serious Area and Section 189(d) Plan for Attainment of the 1997 Annual PM_{2.5} NAAQS (EPA-R09-OAR-2021-0260)."

⁸ Letter dated August 23, 2021, from Paul Cort, Earthjustice, et al., to Ashley Graham, EPA Region IX, Subject: "Re: Proposed Partial Disapproval of San Joaquin Valley Serious Area Plan for Attainment of the 1997 Annual PM_{2.5} NAAQS (Docket ID No. EPA-R09-OAR-2021-0260)," including attachments A through G. The environmental and community organizations, in order of appearance in the letter, include Central Valley Air Quality Coalition, National Parks Conservation Association, Earthjustice, Climate Policy Coordinator, Leadership Council for Justice and Accountability, The Climate Center, Central California Environmental Justice Network, Little Manila Rising, Madera Coalition for Community Justice, Mi Familia Vota, Fresno Building Healthy Communities, Valley Improvement Projects, Clean Water Action, The San Joaquin Valley Latino Equity Advocacy & Policy Institute, Coalition for Clean Air, and Center for Race, Poverty, and the Environment (collectively "Earthjustice").

base year emissions inventories but is concerned about the proposed disapproval of the attainment demonstration and related elements. The District notes that it adopted the SJV PM_{2.5} Plan on November 15, 2018, and that CARB adopted the plan on January 24, 2019, and states that it is unfortunate that CARB did not submit the plan to the EPA until May 10, 2019. The District also notes that the EPA did not take action to approve or disapprove the Plan by November 10, 2020, as required by statute.

Response A.1: We acknowledge that the EPA did not take action to approve or disapprove the SJV PM_{2.5} Plan by November 10, 2020, as required by the Act. With this final action, we are discharging the EPA's statutory obligation under CAA section 110(k)(2) to act on the SIP submission.

Comment A.2: SJVUAPCD states that “[i]t is absurd and inequitable to disapprove a plan because monitoring data that was unavailable when the plan was completed now contradicts the modeling in the plan.” In support of its argument, the commenter quotes from the D.C. Circuit Court of Appeals’ decision in *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118 (D.C. Cir. 2015):

We will not invalidate EPA’s predictions solely because there might be discrepancies between those predictions and the real world. That possibility is inherent in the enterprise of prediction. The best model might predict that the Nationals will win the World Series in 2015. If that does not happen, you can’t necessarily fault the model. As we have said previously, the fact that a ‘model does not fit every application perfectly is no criticism; a model is meant to simplify reality in order to make it tractable. See *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118, 135 (D.C. Cir. 2015), citing *Chemical Manufacturers Association v. EPA*, 28 F.3d 1259, 1264 (D.C. Cir. 1994).

Response A.2: We disagree with the commenter’s claim that it is absurd and inequitable to disapprove the SJV PM_{2.5} Plan based on ambient air quality monitoring data that contradicts the modeling in the plan. Section 189(b) of the CAA requires that a state with a Serious PM_{2.5} nonattainment area submit, among other things, a demonstration that the plan “provides for attainment of the [PM_{2.5} NAAQS] by the applicable attainment date,” and section 189(d) similarly requires that a state with a Serious PM_{2.5} nonattainment area that fails to attain by the applicable attainment date submit plan revisions that, among other things, “provide for

attainment of the [PM_{2.5} NAAQS].” Nothing in the CAA or in the EPA’s implementing regulations precludes the EPA’s consideration of ambient air monitoring data in determining whether a submitted plan satisfies these statutory requirements. The EPA’s longstanding guidance on modeled attainment demonstrations highlights the importance of considering recent design values (i.e., ambient air quality data) in selecting a base modeling year and projecting future changes in emissions and ambient concentrations.⁹ Consistent with this guidance, the EPA routinely considers ambient air quality data during the model performance evaluation process that it conducts to determine whether a state’s air quality model provides reliable predictions of future pollutant concentrations.¹⁰ The commenter provides no statutory or regulatory support for a claim that the EPA cannot consider available ambient air quality data as part of its review of a submitted attainment demonstration to determine whether it “provides for” attainment of the NAAQS by the applicable attainment date.

Generally, an attainment demonstration is a predictive tool for assessing air quality at a future time, and as the D.C. Circuit stated in *EME Homer City Generation*, the possibility of discrepancies between predictions and the real world is “inherent in the enterprise of prediction.”¹¹ In this case, however, CARB submitted the attainment demonstration for the 1997 annual PM_{2.5} NAAQS less than 20 months before the State’s projected attainment date (i.e., December 31, 2020),¹² and the EPA’s action on the SJV PM_{2.5} Plan is occurring at a time when that attainment date is no longer a projected date because the date has passed. Thus, our evaluation of the attainment demonstration is no longer based on “predictions.” Complete, quality-assured, and certified ambient air quality data available to the EPA at this time clearly indicate that the SJV PM_{2.5} Plan failed to “provide for” attainment of the 1997 annual PM_{2.5}

⁹ Memorandum dated November 29, 2018, from Richard A. Wayland, Division Director, Air Quality Assessment Division, Office of Air Quality Planning and Standards, EPA, to Regional Air Division Directors, Regions 1-10, Subject: “Modeling Guidance for Demonstrating Air Quality Goals for Ozone, PM_{2.5} and Regional Haze,” 18.

¹⁰ See, e.g., EPA, Region IX Air Division, “Technical Support Document, EPA Evaluation of Air Quality Modeling, San Joaquin Valley PM_{2.5} Plan for the 2006 PM_{2.5} NAAQS,” February 2020, 18-24.

¹¹ 795 F.3d at 135 (citing *Chemical Manufacturers Association v. EPA*, 28 F.3d 1259, 1264 (D.C. Cir. 1994)).

¹² CARB submitted the SJV PM_{2.5} Plan on May 10, 2019, well after the statutory deadline for this submission, which was December 31, 2016. 81 FR 84481, 84482 (November 23, 2016).

NAAQS by the State's identified attainment date, December 31, 2020. In this context, it is reasonable for the EPA to take these data into account and, on that basis, to disapprove the attainment demonstration and related elements of the SJV PM_{2.5} Plan for failure to "provide for" attainment of the 1997 annual PM_{2.5} NAAQS by the identified attainment date.

Comment A.3: The commenter asserts that "[t]imely review of the Plan by EPA under the timelines required per statute would have negated the complications cited by EPA in their proposed disapproval." The commenter acknowledges that, according to the Ninth Circuit Court of Appeals' decision in *Sierra Club v. EPA*, 671 F.3d 955 (9th Cir. 2012), the EPA must properly evaluate new information that indicates that a SIP awaiting approval is inaccurate or not current and "may not simply ignore it without reasoned explanation of its choice."¹³ However, the commenter claims that "at issue in this *Sierra Club* case was EPA's 2010 approval of a 2004 plan without consideration of emissions inventory data that became available in 2006" and that "[t]hese timeframes significantly surpass the timeframe at issue now with the District's 2018 PM_{2.5} Plan (adopted in late 2018, demonstrating attainment in 2020, and subject to EPA action in 2021)." The commenter also notes that the Ninth Circuit in *Sierra Club* did not opine on the Petitioners' argument that the EPA improperly approved the plan in 2010 knowing that attainment by the 2010 attainment deadline was impossible.

Response A.3: As discussed in Response A.1, we acknowledge that the EPA did not act on the SJV PM_{2.5} Plan within the statutory timeframe. We note that the EPA's delayed action on the SJV PM_{2.5} Plan was due, in part, to the State's late submission of several overdue attainment plans for multiple PM_{2.5} NAAQS for the San Joaquin Valley¹⁴ in May 2019. Notwithstanding the belated submission of these attainment plans, the EPA has since taken proposed or final action on each required plan.¹⁵ We are now discharging our statutory obligation under CAA section

¹³ 671 F.3d at 967 (9th Cir. 2012).

¹⁴ 83 FR 62720 (December 6, 2018) (identifying statutory deadlines for submission of complete SIPs for 1997, 2006, and 2012 PM_{2.5} NAAQS in the San Joaquin Valley).

¹⁵ 85 FR 44192 (final action on Serious area plan and extension request for 2006 PM_{2.5} NAAQS), 86 FR 38652 (proposed action on Serious area and section 189(d) plan for 1997 annual PM_{2.5} NAAQS), 86 FR 49100 (September

110(k)(2) to act on the SJV PM_{2.5} Plan.

The commenter suggests that *Sierra Club* does not support the EPA's rationale for disapproval of the SJV PM_{2.5} Plan because the period between the State's submission of, and the EPA's action on, the SJV PM_{2.5} Plan (approximately two and a half years, from May 2019 to November 2021) is shorter than the period between the State's submission of, and the EPA's action on, the ozone plan at issue in *Sierra Club* (over five years, from November 2004 to March 2010).¹⁶ This suggestion, however, reflects a misconstruction of the court's holding in this case. In *Sierra Club*, the Ninth Circuit remanded the EPA's March 2010 approval of an ozone attainment plan for the San Joaquin Valley submitted in 2004, holding that the EPA's failure to consider new emissions data that the State had submitted in 2007 as part of a separate ozone plan rendered the EPA's action arbitrary and capricious under the Administrative Procedure Act.¹⁷ Although the court noted the length of the EPA's delay in acting on the 2004 plan submission after updated emissions data had become available, the decision ultimately rested on the unreasonableness of the EPA's failure to address the new emissions data, not on the specific number of years that had passed since the State submitted the plan.¹⁸ The court found the EPA's action arbitrary and capricious because of its "reliance on old data without meaningful comment on the significance of more current compiled data" and concluded that "it was unreasonable for EPA summarily to rely on the point of view taken [in longstanding policy] without advancing an explanation for its action based on 'the facts found and the choice made.'"¹⁹ Contrary to the commenter's characterization of *Sierra Club*, the EPA interprets that decision to stand for the proposition that it would be inappropriate for the EPA to ignore monitoring data that clearly

1, 2021) (proposed action on Moderate area plan for 2012 PM_{2.5} NAAQS), and 86 FR 53150 (September 24, 2021) (proposed action on Serious area and section 189(d) plan for 1997 24-hour PM_{2.5} NAAQS).

¹⁶ 74 FR 33933 (July 14, 2009) (proposed rule) and 75 FR 10420 (March 8, 2010) (final rule).

¹⁷ *Sierra Club v. EPA*, 671 F.3d 955 (9th Cir. 2012). The court also noted that the EPA's action was inconsistent with the court's holding in *Ass'n of Irrigated Residents (AIR) v. EPA*, 632 F.3d 584 (9th Cir. 2011), which "supports the proposition that if new information indicates to EPA that an existing SIP or SIP awaiting approval is inaccurate or not current, then, viewing air quality and scope of emissions with public interest in mind, EPA should properly evaluate the new information and may not simply ignore it without reasoned explanation of its choice." Id. at 967.

¹⁸ Id. at 965-968.

¹⁹ Id. at 968 (citing *Burlington Truck Lines*, 371 U.S. 156, 168 (1962)).

establish, as a factual matter, that the attainment demonstration failed to provide for attainment.

The EPA has reviewed complete, quality-assured, and certified ambient air quality data for the 2018–2020 period that establish that the San Joaquin Valley did not attain the 1997 annual PM_{2.5} NAAQS by the December 31, 2020 attainment date identified in the SJV PM_{2.5} Plan.²⁰ In light of these facts, we conclude that the SJV PM_{2.5} Plan failed to provide for attainment of the 1997 annual PM_{2.5} NAAQS as required by CAA sections 189(b) and 189(d).

The commenter fails to explain its statement that “[n]otably, in deciding the matter based on inventory data, the *Sierra Club* court did not reach Petitioners’ argument that EPA improperly approved the 2004 SIP submission in 2010 knowing that attainment by the 2010 deadline was impossible.” We decline to speculate on the meaning or relevance of the Ninth Circuit’s decision not to reach this issue.

Comment A.4: SJVUAPCD’s comment letter summarizes the regulatory consequences that would result from final disapproval of the SJV PM_{2.5} Plan and states that these consequences could not have been foreseen or avoided in light of recent wildfires and data handling issues. The commenter asserts that a better path would have been for the EPA to “approve the plan as valid at the time of adoption by the District” and concurrently make a finding of failure to attain by the 2020 deadline, triggering a requirement for a revised plan. The commenter claims that this path would be “more consistent with the cooperative federalism embedded in the Clean Air Act” and would have avoided sanctions consequences outside of the District’s direct control, although sanctions would still apply if the District were to fail to submit a revised plan on time.

Response A.4: We disagree with the commenter’s claim that the EPA could have proposed to approve the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS as “valid at the time of adoption by the District.” As discussed in our proposed rule and in Response A.2, complete, quality-assured, and certified ambient air monitoring data for the 2018–2020 period establish that

²⁰ 86 FR 38652, 38665 (Table 5) and fn. 4, *supra* (noting that certified data confirm the preliminary conclusions provided in the EPA’s proposed rule).

the San Joaquin Valley did not attain by the December 31, 2020 attainment date identified by the State in the SJV PM_{2.5} Plan. We are, therefore, disapproving the SJV PM_{2.5} Plan for failure to provide for attainment as required by the CAA.

Comment A.5: SJVUAPCD states that the San Joaquin Valley did not attain by the December 31, 2020 attainment date due to wildfires and data handling issues that were outside of the District's control. The commenter concludes that after accounting for wildfire-related exceptional events, the San Joaquin Valley is attaining the 1997 24-hour PM_{2.5} NAAQS and that all areas except for Bakersfield-Planiz are attaining the 1997 annual PM_{2.5} NAAQS. The commenter attributes the failure to attain at the Bakersfield-Planiz site to data handling issues at the CARB-operated monitor that were outside of the District's control.

The commenter states that the District and CARB have drafted a SIP revision for the 1997 annual PM_{2.5} NAAQS with a December 31, 2023 attainment date, and notes that the District Governing Board adopted the revision on August 19, 2021, and that CARB intends to approve the revision in September 2021. The commenter states that it hopes the EPA will approve the plan revision quickly to avoid a similar situation as the current one.

Response A.5: We appreciate the commenter's perspective on the San Joaquin Valley's air quality challenges and information about recent steps taken by the State and District to develop a revised plan. Comments regarding the revised plan are, however, outside the scope of this rulemaking.

Comment A.6: SJVUAPCD requests that the EPA clearly articulate in the final action on the SJV PM_{2.5} Plan for 1997 annual PM_{2.5} NAAQS that development, review, and approval of new contingency measures for those NAAQS are governed by a timeline separate from the elements included in the SIP revision that the District Governing Board adopted on August 19, 2021. The commenter states that the District looks forward to working with CARB and the EPA to address the contingency measure requirements.

Response A.6: There is no separate timeline associated with the requirement for the

contingency measure element, as the commenter suggests. As discussed in section III of this notice, as a result of this final action, California will be required to develop and submit a revised plan for the San Joaquin Valley that satisfies the CAA's Serious area and section 189(d) requirements, including the requirement for contingency measures, for the 1997 annual PM_{2.5} NAAQS. Section III of this final rule discusses the timeline for application of mandatory offset and highway sanctions as a result of this final disapproval.

Comment A.7: SJVUAPCD asserts that the federal government has not done enough to achieve reductions in emissions from mobile sources and that this has resulted in “disproportionate pressure on the District and CARB to continue reduc[ing] emissions to make up the shortfall, demonstrate attainment, and satisfy contingency requirements.”

Response A.7: These comments do not identify a specific issue that is relevant to the EPA's action on the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS.

Comment A.8: SJVUAPCD asserts that the SJV PM_{2.5} Plan for the 1997 NAAQS is fully approvable even though the San Joaquin Valley did not attain by the December 31, 2020 attainment date.

Response A.8: We disagree with these comments. See Response A.2.

B. Comments from Earthjustice

Comment B.1: Earthjustice asserts that the EPA's proposed approval of the 2013 base year emissions inventories is arbitrary and capricious. Specifically, Earthjustice argues that because the inventories were developed using a mobile source emissions model (i.e., EMFAC2014) that has since been updated, the 2013 baseline emissions inventories do not reflect the best information available. Earthjustice claims that “CARB and the District know the emissions assumptions included in the 2013 baseline inventory do not reflect the best information because they have a more current, more accurate EMFAC2017 model that undermines those EMFAC2014 results.” The commenter states that the EPA has not offered an analysis to support a conclusion that only the modeling was incorrect, and not the baseline

emissions inventory inputs used in the modeling. Earthjustice further asserts that the inventories are inextricably tied to the attainment demonstration and related elements, and that because the area did not attain by the attainment date in the Plan, the EPA must also disapprove the inventories. The commenter asserts that there is no reason for the EPA to approve the emissions inventories if the remainder of the plan is disapproved.

Finally, Earthjustice states that the State must develop a new plan and that the new plan cannot rely on the 2013 base year emissions inventories that the EPA has proposed to approve, but rather the State must develop the new plan using the updated mobile source emissions model EMFAC2017. Earthjustice also claims that the State must use EMFAC2017 in any new regional and hot-spot analyses because the transportation conformity grace periods have expired.

Response B.1: The EPA disagrees with Earthjustice's claim that our approval of the 2013 base year inventories is arbitrary and capricious. We evaluated the emissions inventories in the SJV PM_{2.5} Plan to determine if they satisfy CAA requirements as interpreted in the EPA's regulations at 40 CFR 51.1008 and in the preamble to the EPA's implementation rule for the PM_{2.5} NAAQS (hereafter "PM_{2.5} SIP Requirements Rule").²¹ As discussed in the proposal, we found that the State and District had used emissions inventory estimation methodologies consistent with the EPA's recommendations, and that the inventories in the SJV PM_{2.5} Plan are comprehensive and based on the most current and accurate information available to the State and District when they were developing the Plan.²² Based on these evaluations, we proposed to approve the 2013 base year emissions inventories in the SJV PM_{2.5} Plan as meeting the requirements of CAA section 172(c)(3) and 40 CFR 51.1008.

CARB used its mobile source emissions model, EMFAC2014, to generate the on-road mobile source inventories in the SJV PM_{2.5} Plan. The EPA approved EMFAC2014 for use in SIPs and conformity determinations on December 14, 2015.²³ At the time that the State and

²¹ 81 FR 58010 (August 24, 2016).

²² 86 FR 38652, 38658.

²³ 80 FR 77337.

District were developing the SJV PM_{2.5} Plan, EMFAC2014 was the most current mobile source model available for emissions inventory development purposes. CARB submitted the SJV PM_{2.5} Plan to the EPA on May 10, 2019. On August 15, 2019, the EPA approved EMFAC2017, the latest revision to this mobile source emissions model.²⁴ We find that it would be unreasonable to require the State and District to revise the SJV PM_{2.5} Plan because of an updated EMFAC model that the EPA approved several months after the State's submission of the Plan. The EPA has stated in longstanding policy that the CAA does not require states that have already submitted SIP submissions or will submit SIP submissions shortly after the release of a new mobile source model to revise these submissions simply because a new motor vehicle emissions model is available, as it would be unreasonable to require a state to revise such a submission after significant work had already occurred.²⁵

Nevertheless, the EPA has considered information regarding the differences between the EMFAC2014 and EMFAC2017 emissions estimates that has become available since our proposal. On November 8, 2021, CARB submitted a SIP revision to address the CAA requirements for the 1997 annual PM_{2.5} NAAQS.²⁶ The submission included CARB's "Staff Report, Proposed SIP Revision for the 15 µg/m³ Annual PM_{2.5} Standard for the San Joaquin Valley" ("CARB Staff Report"), which includes a comparison of estimated annual NO_x and PM_{2.5} emissions in the San Joaquin Valley in the 2013 base year.²⁷ CARB determined that PM_{2.5} emissions estimates for 2013 derived using EMFAC2017 are approximately six percent higher

²⁴ 84 FR 41717. The grace period for new regional emissions analyses begins on August 15, 2019, and ends on August 16, 2021, while the grace period for hot-spot analyses begins on August 15, 2019, and ends on August 17, 2020. *Id.* at 41720.

²⁵ EPA, Office of Transportation and Air Quality, "Policy Guidance on the Use of MOVES3 for State Implementation Plan Development, Transportation Conformity, General Conformity, and Other Purposes," November 2020, 7, 8; EPA, Office of Air Quality Planning and Standards, Air Quality Assessment Division, "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations," May 2017, 27, 28; and memorandum dated January 18, 2002, from John Seitz, Office of Air Quality Planning and Standards and Margo Oge, Office of Transportation and Air Quality, EPA, "Policy Guidance on the Use of MOBILE6 for SIP Development and Transportation Conformity."

²⁶ Letter dated November 8, 2021, from Richard W. Corey, Executive Officer, CARB, to Deborah Jordan, Acting Regional Administrator, EPA Region 9.

²⁷ Available at <https://ww2.arb.ca.gov/sites/default/files/2021-08/SJV%2015%20ug%20SIP%20Revision%20Staff%20Report%20FINAL.pdf>.

than estimates derived using EMFAC2014, and that NO_x emissions estimates for 2013 derived using EMFAC2017 are seven percent lower than the emissions estimates derived using EMFAC2014.²⁸ CARB also concluded that the differences in 2013 base year emissions derived using EMFAC2014 and EMFAC2017 are not significant enough to affect the modeled attainment demonstration in the revised SIP submission. Thus, CARB's analyses support our conclusion that the 2013 base year emissions inventories in the SJV PM_{2.5} Plan are comprehensive, accurate, and current, consistent with the requirements of CAA section 172(c)(3) and 40 CFR 51.1008.

The EPA also disagrees with the commenter's claim that the base year emissions inventories are "inextricably tied to the demonstration of attainment" and related plan elements and that disapproval of the attainment demonstration thus requires disapproval of the emissions inventories. Section 172(c)(3) of the CAA requires that plans for nonattainment areas include "a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area, including such periodic revisions as the Administrator may determine necessary to assure that the requirements of [part D of title I of the CAA] are met." Nothing in the text of section 172(c)(3) indicates that the EPA cannot evaluate the adequacy of the emissions inventories independent of other requirements such as RFP or attainment.

As the EPA explained in the preamble to the EPA's PM_{2.5} SIP Requirements Rule, the base year emissions inventory requirement in CAA section 172(c)(3) is a requirement independent of the attainment demonstration and related plan elements and, therefore, is not suspended by a determination by the EPA that the area has attained the NAAQS (i.e., a "clean data determination").²⁹ For over 25 years, the EPA has maintained its interpretation in the "Clean Data Policy," now codified at 40 CFR 51.1015 for PM_{2.5} purposes, that only those plan

²⁸ The CARB Staff Report indicates that 2013 annual emissions derived using EMFAC2014 are 183.09 tpd of NO_x and 6.45 tpd of PM_{2.5}, whereas 2013 annual emissions derived using EMFAC 2017 are 170.04 tpd of NO_x and 6.83 tpd of PM_{2.5}. CARB Staff Report, Table 2.

²⁹ 81 FR 58010, 58128.

requirements that are linked by their terms to the CAA's requirements for attainment and RFP (e.g., the attainment demonstration, RFP, and contingency measures) are suspended upon a determination by the EPA that the area is attaining the relevant NAAQS.³⁰ Consistent with this longstanding interpretation, 40 CFR 51.1015 excludes the base year emissions inventory from the attainment-related requirements that are suspended upon a clean data determination for the PM_{2.5} NAAQS.³¹ The commenter provides no statutory support for a claim that the requirement for emissions inventories in CAA section 172(c)(3) is inextricably tied to the attainment demonstration and related plan elements. Put simply, an emissions inventory may still be adequate, even if other elements (e.g., a failure to evaluate and impose control measures on sources that would result in attainment) of an attainment plan are not.

We also disagree with the commenter's assertion that there is no reason for the EPA to approve the emissions inventories if the remainder of the plan is being disapproved. Under CAA section 110(k)(3), the EPA may approve any portion of a SIP submission that meets the requirements of the Act. For the reasons provided in the proposal, the EPA finds that the 2013 base year emissions inventories in the SJV PM_{2.5} Plan are consistent with the requirements of the CAA, as interpreted in the EPA's regulations and guidance.

Earthjustice's claim that in a new attainment plan for the 1997 annual PM_{2.5} NAAQS for the San Joaquin Valley the State "cannot rely on the 2013 base year inventory that EPA proposes to approve" is outside of the scope of this rulemaking. The EPA will review the revised attainment plan submitted by the State on November 8, 2021, for compliance with the

³⁰ Memorandum dated May 10, 1995, from John S. Seitz, Director, EPA Office of Air Quality Planning and Standards (OAQPS), to Air Division Directors, EPA Regions I – X, Subject: "Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard" and memorandum dated December 14, 2004, from Stephen D. Page, Director, OAQPS, EPA, to Air Division Directors, EPA Regions I-X, Subject: "Clean Data Policy for the Fine Particle National Ambient Air Quality Standards."

³¹ 40 CFR 51.1015 (stating that "[u]pon a determination by the EPA that a [] PM_{2.5} nonattainment area has attained the PM_{2.5} NAAQS, the requirements for the state to submit an attainment demonstration, reasonable further progress plan, quantitative milestones and quantitative milestone reports, and contingency measures for the area shall be suspended until" the area is redesignated to attainment, after which such requirements are permanently discharged, or the EPA determines that the area has re-violated the PM_{2.5} NAAQS, at which time the requirements are reinstated. See also 40 CFR 51.918, 51.1118, and 51.1318 (similarly suspending attainment-related planning requirements, but not emissions inventory requirements, upon a clean data determination for the ozone NAAQS).

requirements of the CAA and the EPA's regulations and will determine, following notice-and-comment rulemaking, whether the submission satisfies all applicable CAA requirements. We encourage Earthjustice to resubmit these comments as appropriate during such a future rulemaking.

Finally, Earthjustice is correct that because the transportation conformity grace periods for use of EMFAC2014 have expired, the State must use EMFAC2017 in any new regional emissions analyses that begin on or after August 16, 2021,³² unless and until the EPA approves a new version of EMFAC. This means that all new hydrocarbon, NO_x, PM₁₀, PM_{2.5}, and CO regional conformity analyses started after the end of the two-year grace period must be based on EMFAC2017, even if the SIP is based on an earlier version of the EMFAC model.

Comment B.2: Earthjustice states that it agrees with the EPA's proposal to disapprove the precursor demonstration in the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS but asserts that the EPA's reasoning necessitates certain other findings by the EPA. Earthjustice describes the EPA's reasoning in the proposed rule³³ as tying the precursor demonstration to the attainment demonstration and asserts that if the attainment demonstration has proven to be wrong, then the precursor demonstration must necessarily also be wrong, both for the 1997 annual PM_{2.5} NAAQS and for the 1997 24-hour PM_{2.5} NAAQS. Earthjustice states that the "defects" in the precursor demonstration for the 1997 annual PM_{2.5} NAAQS also "infect the precursor demonstration for the 1997 24-hour standard plan" and that the EPA should disapprove that demonstration as well "to make it clear to the District and CARB that a new analysis for both standards will be required." Earthjustice also reiterates its concerns with the precursor demonstration that it raised previously in comments on the EPA's approval of the plan for the 2006 24-hour PM_{2.5} NAAQS, such as the failure to properly account for NO_x emissions from

³² The grace period for use of EMFAC2014 in conformity determinations for projects ended on August 17, 2020 and the grace period for use of EMFAC2014 in regional plan and TIP conformity determinations ended on August 16, 2021. 84 FR 41717.

³³ 86 FR 38652, 38660.

soil and the refusal to consider the cost-effectiveness of ammonia controls as compared to NO_x controls. The commenter asserts that should the EPA decide to approve the precursor demonstration despite the failure of the attainment demonstration, the EPA must issue a new proposal that explains the EPA's rationale and offers the public the opportunity to review and comment.

Response B.2: The EPA acknowledges Earthjustice's support for disapproving the precursor demonstration but does not agree with the commenter's characterization of the EPA's rationale for the disapproval. As we explained in the proposed rule, the EPA proposed to disapprove the attainment demonstration and related elements in the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS based on ambient monitoring data that show that the Plan was insufficient to achieve attainment of the 1997 annual PM_{2.5} NAAQS by December 31, 2020, the State's projected attainment date.³⁴ We further explained that "[g]iven that we are proposing to disapprove the attainment demonstration, and given that the precursor demonstration for the 1997 annual PM_{2.5} NAAQS largely relies on the technical analyses and assumptions that provide the basis for the attainment demonstration, we are also proposing to disapprove the precursor demonstration in the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS."³⁵

The EPA is not taking the position that disapproval of an attainment demonstration necessarily renders the associated precursor demonstration deficient in all cases. Nothing in the CAA, the PM_{2.5} SIP Requirements Rule,³⁶ or in the EPA's guidance on PM_{2.5} precursor demonstrations (hereafter "PM_{2.5} Precursor Guidance")³⁷ indicates that approval of a precursor demonstration is necessarily contingent upon approval of the associated attainment demonstration. Where the modeled attainment demonstration and the precursor demonstration

³⁴ Id. at 38665-38666.

³⁵ Id. at 38660.

³⁶ 81 FR 58010.

³⁷ Memorandum dated May 30, 2019, from Scott Mathias, Acting Director, Air Quality Policy Division and Richard Wayland, Director, Air Quality Assessment Division, Office of Air Quality Planning and Standards (OAQPS), EPA to Regional Air Division Directors, Regions 1–10, EPA, Subject: "Fine Particulate Matter (PM_{2.5}) Precursor Demonstration Guidance," attaching "PM_{2.5} Precursor Demonstration Guidance," EPA-454/R-19-004, May 2019.

are based on the same modeling platform, the EPA may find that fundamental flaws in that modeling platform render both demonstrations deficient. But the EPA evaluates each demonstration on its own merits, and in some cases the EPA may find it appropriate to approve a precursor demonstration even if the attainment demonstration with which it is associated is deficient.

In this case, we find that the modeling platform used in the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS is adequate to support both the attainment demonstration and the precursor demonstration for the 1997 annual PM_{2.5} NAAQS. Although we are disapproving the attainment demonstration for the 1997 annual PM_{2.5} NAAQS based on ambient air quality monitoring data that show that the area failed to attain these NAAQS by the end of 2020, our disapproval does not rest on a conclusion that the modeling platform is fundamentally flawed. In our discussion about the modeling platform in the proposal, we stated that “[t]he magnitude and timing of predicted concentrations of total PM_{2.5} [in the San Joaquin Valley]... generally match the occurrence of elevated PM_{2.5} levels in the measured observations” and “[a] comparison to other recent modeling efforts shows good model performance on bias, error, and correlation with measurements, for total PM_{2.5} and for most of its chemical components.”³⁸ The same modeling platform provides the basis for California’s Serious area plan for attainment of the 2006 PM_{2.5} NAAQS in the San Joaquin Valley that the EPA approved on July 22, 2020,³⁹ the Moderate area plan for the 2012 annual PM_{2.5} NAAQS in the San Joaquin Valley that the EPA proposed to approve on September 1, 2021,⁴⁰ and the Serious area and CAA section 189(d) plan for the 1997 24-hour PM_{2.5} NAAQS in the San Joaquin Valley that the EPA proposed to approve on September 24, 2021.⁴¹

We acknowledge that the modeling erroneously projected that the San Joaquin Valley

³⁸ 86 FR 38652, 38664.

³⁹ 85 FR 44192. See also EPA, “Technical Support Document, EPA Evaluation of Air Quality Modeling, San Joaquin Valley PM_{2.5} Plan for the 2006 PM_{2.5} NAAQS,” February 2020 (“2006 PM_{2.5} NAAQS Modeling TSD”), section J (“Air Quality Model Performance”).

⁴⁰ 86 FR 49100.

⁴¹ 86 FR 53150.

would attain the 1997 annual PM_{2.5} NAAQS by the end of 2020. There are a number of factors other than flaws in the modeling itself that may result in model predictions not matching monitored values, including meteorology in the attainment year that differs substantially from meteorology in the modeling platform base year, and actual emissions levels in the attainment year that differ substantially from projected emissions levels. The modeling platform uses 2013 as a base year, with emissions and meteorology from 2013 as inputs, and with performance validated against 2013 monitored concentrations. If the meteorological conditions in 2020 were more conducive to PM_{2.5} formation than those in 2013, then the 2020 design value would be higher than predicted by the modeling with its 2013 base case, even if the model itself is performing well. Natural variability in meteorological conditions can cause model predictions based on one year to overestimate or underestimate concentrations for a different year.⁴²

Similarly, unpredictable emissions differences can lead to differences between modeled and observed concentrations. There were high particulate and precursor emissions in the years 2018 and 2020 from unexpected wildfires in the areas surrounding the San Joaquin Valley during the summer and fall months. Wildfires were not included in the State's modeling emissions inventory, but base period wildfire emissions can indirectly affect predicted future concentrations when they are estimated using Relative Response Factors (RRFs), as recommended in the EPA's "Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze" ("Modeling Guidance").⁴³ We note that wildfires were much less prevalent

⁴² The differences in modeled conduciveness to PM_{2.5} formation in 2020 versus 2013 is not the result of the State choosing an unusually favorable base year. As explained in the Plan's modeling protocol, the State chose the 2013 base year as representative of conditions conducive to poor air quality based on meteorology-adjusted trends. 2018 PM_{2.5} Plan, Appendix L, L-12.

⁴³ "Modeling Guidance for Demonstrating Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze," EPA-454/R-18-009, November 2018, 100. Available at <https://www.epa.gov/scram/state-implementation-plan-sip-attainment-demonstration-guidance>. Modeled RRFs represent the model concentration response to emissions changes between the base year and future year and are multiplied by base design values to estimate future concentrations. The base design values are estimated from several years of monitored concentrations and reflect wildfire emissions present in the base period. Note, however, that the base design value would not reflect wildfire-influenced monitor data excluded via the Exceptional Events Rule process (see 40 CFR 50.1(j), (k), (l); 50.14(a)(1)(i); 51.930) or as otherwise modified to exclude data unrepresentative for modeling purposes. The only data that CARB excluded for the base design value period 2010–2014 was for high wind fugitive dust events on April 11, 2010 and May 5, 2013 at the Bakersfield-Planz site. CARB's "Staff Report, Review of the San Joaquin Valley 2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards," release date December 21, 2018, Appendix C1 and C2.

during the 2010–2014 period that was used to estimate the base design value,⁴⁴ compared to the number and severity of wildfires in and around the San Joaquin Valley during the 2018–2020 period used to calculate the 2020 monitored design value.⁴⁵ While they likely were not the sole factor, the 2018–2020 wildfires may have contributed to the State’s underestimated design value projection for 2020, even though the model was not deficient.

Finally, the State’s technical findings in the precursor demonstration analysis support the EPA’s disapproval of it for purposes of the 1997 annual PM_{2.5} NAAQS. To support the precursor demonstration, the State used the modeling platform discussed above to assess the sensitivity of PM_{2.5} concentrations to reductions in precursor concentrations. The State modeled precursor emissions reductions and compared the resulting changes in PM_{2.5} concentrations to 0.2 micrograms per cubic meter (µg/m³), the EPA’s recommended contribution threshold for the annual PM_{2.5} NAAQS.⁴⁶ The modeled PM_{2.5} responses to a 30 percent ammonia emissions reduction for the 2013 base year ranged from 0.20 to 0.72 µg/m³, exceeding the 0.2 µg/m³ contribution threshold at 14 of 15 monitoring sites.⁴⁷ For the 2020 future year, the modeled PM_{2.5} responses to a 30 percent ammonia emissions reduction ranged from 0.12 to 0.42 µg/m³, exceeding the 0.2 µg/m³ contribution threshold at 9 of 15 monitoring sites. For the 2024 future year, the response ranged from 0.08 to 0.26 µg/m³; exceeding 0.2 µg/m³ at two monitoring sites.⁴⁸

For the approval of the precursor demonstration for the 2006 24-hour NAAQS,⁴⁹ and for the proposed approvals of the precursor demonstration for the 1997 24-hour NAAQS⁵⁰ and the

⁴⁴ The average number of acres burned in wildfires in California during 2010–2014 was 484,000; 2010 had the highest acreage burned, 913,000, and 2013 had 602,000. By contrast, the 2018–2020 average was 2,062,000; 2020 had the highest acreage burned, 3,950,000. California Department of Forestry and Fire Protection (CAL FIRE), CAL FIRE Stats and Events, <https://www.fire.ca.gov/stats-events/>, accessed October 4, 2021.

⁴⁵ Wildfire-influenced monitor data during August 20–24, 2020 were excluded under the Exceptional Events Rule for the 1997 24-hour PM_{2.5} NAAQS, but this exclusion did not affect the design value for the annual 1997 PM_{2.5} NAAQS. Letter dated July 13, 2021 from Elizabeth J. Adams, Director, Air and Radiation Division, EPA Region IX, to Michael Benjamin, Division Chief, Air Quality Planning and Science Division, CARB.

⁴⁶ PM_{2.5} Precursor Demonstration Guidance, 17.

⁴⁷ 2018 PM_{2.5} Plan, Appendix G, Table 2.

⁴⁸ Id. at Table 4 and Table 5.

⁴⁹ 85 FR 44192.

⁵⁰ 86 FR 53150.

2012 annual NAAQS,⁵¹ the EPA partly relied on model estimates of ammonia sensitivity from the 2024 future year. There is evidence that NO_x emissions reductions that are projected to occur by 2024 result in the modeling for 2024 being more representative of current ambient conditions, as reflected in monitoring studies of nitrate and ammonia.⁵² For 2024, all monitoring sites were projected to have 24-hour PM_{2.5} responses below the 1.5 µg/m³ contribution threshold. In addition, the 24-hour modeled PM_{2.5} responses are below the threshold at all but one site in 2020, and there were no monitored violations of the 1997 24-hour PM_{2.5} NAAQS in 2020. Thus, the EPA concluded that ammonia is not contributing to PM_{2.5} levels above the 1997 24-hour PM_{2.5} NAAQS in the 2020 attainment year.

In contrast, for the 1997 annual PM_{2.5} NAAQS, certified ambient air quality data show that the San Joaquin Valley recorded PM_{2.5} levels exceeding the NAAQS in 2020, so the monitoring data alone do not support a conclusion that ammonia emissions do not contribute significantly to levels exceeding the NAAQS. Also, the modeling results indicate that annual average PM_{2.5} concentrations are more sensitive than 24-hour average PM_{2.5} concentrations to ammonia reductions. The evidence that modeling for 2024 is representative of current ambient conditions supports giving relatively less weight to the 2020 results. However, for the annual NAAQS there are 9 sites out of 15 above the contribution threshold in 2020, too many to discount. Furthermore, even the 2024 results show two sites above the contribution threshold. The combined results for 2020 and 2024 contradict a conclusion that ammonia emissions do not contribute significantly to PM_{2.5} levels that exceed the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley.

With respect to Earthjustice's claim that the "defects" in the precursor demonstration for the 1997 annual PM_{2.5} NAAQS also necessitate disapproval of the precursor demonstration for the 1997 24-hour PM_{2.5} NAAQS, we note that these comments are outside the scope of this

⁵¹ 86 FR 49100.

⁵² 2006 PM_{2.5} NAAQS Modeling TSD, 11.

rulemaking, as our action today pertains only to the Serious area and CAA section 189(d) plan for the 1997 annual PM_{2.5} NAAQS.⁵³

With respect to Earthjustice's statement that it previously raised concerns about the precursor demonstration in comments on the EPA's separate approval of the attainment plan for the 2006 24-hour PM_{2.5} NAAQS, e.g., concerning failure to account for NO_x emissions from soil and to consider the cost-effectiveness of ammonia controls as compared to NO_x controls, the EPA responded to those comments in the "Response to Comments Document for the EPA's Final Action on the San Joaquin Valley Serious Area Plan for the 2006 PM_{2.5} NAAQS," dated June 2020, which is available at <https://www.regulations.gov> under Docket ID No. EPA-R09-OAR-2019-0318 (see Response 6.P-1 and Response 6.Q).

Finally, we do not dispute the commenter's assertion that we could not approve the precursor demonstration without issuing a new proposal that explains our rationale and provides an opportunity for public comment.

Comment B.3: Earthjustice supports the EPA's proposal to disapprove the Plan's BACM demonstration. Earthjustice also states that, even if the EPA were to approve the precursor demonstration in the Plan, the EPA could not finalize an approval of the BACM demonstration without a new proposal, and that any action to approve the plan's BACM demonstration must provide an analysis of the issues pertaining to control measures that the commenter identified in prior comments submitted to the EPA and offer commenters the ability to review that analysis.

Response B.3: We are finalizing our proposal to disapprove both the precursor demonstration and the BACM demonstration in the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS and, therefore, do not provide specific responses to these comments. When the EPA proposes to take action on a new or revised BACM demonstration submitted by the State to satisfy CAA requirements applicable to the San Joaquin Valley area for these NAAQS, the EPA

⁵³ The EPA has separately proposed action on the Serious area and CAA section 189(d) plan for the 1997 24-hour PM_{2.5} NAAQS in the San Joaquin Valley. 86 FR 53150.

will provide a full analysis to support its proposal and will provide a minimum 30-day period for public comments on that proposal, consistent with the requirements of the Administrative Procedure Act.⁵⁴

Comment B.4: Earthjustice states that it agrees with the EPA’s proposal to disapprove the five percent annual emissions reduction demonstration, asserting that because the SJV PM_{2.5} Plan “failed to show 5 percent reductions beyond the 2020 attainment date, and the area has still not attained, the 5 percent demonstration is deficient on its face.” The commenter further claims that the five percent annual reductions demonstration must be disapproved because it relies on a “flawed emission inventory built with an outdated EMFAC model.” The commenter requests clarification regarding the EPA’s statement that greater than the required five percent annual emissions reductions have been achieved and removal of Table 3 in the proposal because the commenter asserts that the five percent requirement cannot be assessed without a “valid current and accurate inventory.”

Response B.4: We agree with the commenter that the EPA cannot approve the five percent annual emissions reduction demonstration in the SJV PM_{2.5} Plan given that the Plan demonstrates reductions only through 2020, the area did not attain by 2020, and therefore the Plan does not meet the requirement to demonstrate five percent reductions per year until attainment. We are, therefore, disapproving the five percent emissions reduction demonstration in the Plan. However, we disagree with the commenter’s claim that the EPA must also disapprove the five percent demonstration specifically “because it relies on a flawed emission inventory built with an outdated EMFAC model.” See Response B.1.

With respect to Earthjustice’s assertion that Table 3 in our proposed rule should be

⁵⁴ Section 553 of the Administrative Procedure Act requires that federal agencies provide general notice of proposed rulemaking by publication in the *Federal Register* and to “give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation.” 5 U.S.C. 553(b), (c). See also CAA section 307(h) (requiring, consistent with the policy of subchapter II of chapter 5 of Title 5, that the EPA “ensure a reasonable period for public participation of at least 30 days” in promulgating any regulation under title I of the Act).

removed, we note that this table simply summarizes the State's submission⁵⁵ and does not constitute an approval of the submitted five percent annual emissions reduction demonstration, in any respect. Earthjustice also requests that the EPA clarify its statement in the proposed rule that "NO_x emissions reductions are greater than the required five percent per year."⁵⁶ We explained in the proposed rule that "[t]he State's methodology for calculating the five percent emission reduction targets for the years 2017, 2018, 2019, and 2020 is consistent with CAA requirements as interpreted in the PM_{2.5} SIP Requirements Rule, and the Plan shows that NO_x emissions reductions from 2017 to 2020 are greater than the required five percent per year."⁵⁷

We included these statements in the proposed rule to explain how we were evaluating the State's submitted five percent annual emissions reduction demonstration, and to distinguish those portions of the submitted analysis that appear to meet CAA requirements from those portions that do not. The State's identification of 2013 as the starting point for the calculation of the five percent reduction required under CAA section 189(d) is appropriate because 2013 is one of the three years for which the EPA evaluated monitored air quality data to determine that the San Joaquin Valley had failed to attain the 1997 PM_{2.5} NAAQS⁵⁸ and, thus, may be treated as the "the most recent inventory" for this purpose.⁵⁹ The State's identification of 2017 as the first year during which the Plan must provide for the required five percent reduction from base year emissions levels is appropriate because the due date for the section 189(d) plan was December 31, 2016.⁶⁰ Thus, if the five percent annual reduction calculation is based on an approvable base

⁵⁵ 86 FR 38652, 38663.

⁵⁶ Id. at 38662.

⁵⁷ Id.

⁵⁸ The EPA determined on November 23, 2016, that the San Joaquin Valley had failed to attain the 1997 annual and 24-hour PM_{2.5} NAAQS. 81 FR 84481.

⁵⁹ 81 FR 58010, 58099 (stating that, for purposes of calculating the emission reductions necessary to satisfy the five percent annual reduction criterion of CAA section 189(d), "the EPA strongly recommends that the inventory year be one of the 3 years from which monitored air quality data were used to determine that the area failed to attain" the relevant PM_{2.5} NAAQS).

⁶⁰ Id. at 58101 (stating that "[t]he requirement for a 5 percent annual reduction in any one pollutant, calculated based on the emissions levels in the most recent inventory, must then be achieved every year between *the CAA section 189(d) plan submission date* and the new projected attainment date for the area") (emphasis added) and 83 FR 62720 (identifying December 31, 2016 deadline for submission of 189(d) plan for the 1997 PM_{2.5} NAAQS for the San Joaquin Valley).

year emissions inventory and the Plan provides for the calculated level of reduction each year beginning after the due date for the section 189(d) plan, the calculation itself is consistent with the EPA's interpretation of the section 189(d) requirements.

As we explained in the proposed rule, however, the Plan fails to satisfy CAA section 189(d) requirements because the December 31, 2020 attainment date identified in the Plan is not the "applicable attainment date," and the Plan therefore does not provide annual reductions of at least five percent each year from the date of plan submission "until the applicable attainment date approved by the EPA."⁶¹ Because we are disapproving the five percent annual emissions reduction demonstration in the Plan, the State is required to submit a revised plan that satisfies the requirements of section 189(d). The EPA will evaluate any revised plan submitted by the State for compliance with the statutory and regulatory requirements and will provide the public an opportunity to comment on the EPA's proposed action on any such submission, consistent with the requirements of the Administrative Procedure Act.⁶²

Comment B.5: Earthjustice states that it agrees that the EPA cannot approve the modeling demonstration in the SJV PM_{2.5} Plan because design values in the San Joaquin Valley in 2020 were above the NAAQS at half of the monitoring sites. The commenter notes that the EPA has not provided a full evaluation of the attainment demonstration and that if the EPA should change course and decide to approve the attainment demonstration, it must repropose the action and provide a full evaluation. Finally, referencing a previous comment letter submitted to the EPA, the commenter asserts that the State and District cannot claim to have met the statutory obligation to demonstrate attainment of the 1997 annual PM_{2.5} NAAQS as expeditiously as practicable because the Plan does not meet the requirements for BACM and MSM.

Response B.5: We are finalizing our proposal to disapprove the attainment demonstration

⁶¹ 40 CFR 51.1000 (defining "applicable attainment date" as the latest statutory date by which an area is required to attain a particular PM_{2.5} NAAQS or the attainment date approved by the EPA as part of an attainment plan for the area). See also 86 FR 38652, 38663 (explaining that the December 31, 2020 attainment date projected by the State is not the "applicable attainment date" for purposes of the 1997 annual PM_{2.5} NAAQS in this area because the EPA is proposing to disapprove the attainment demonstration).

⁶² 5 U.S.C. 553(b), (c).

in the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS and, therefore, do not provide specific responses to these comments. When the EPA proposes to take action on a new or revised attainment demonstration for the San Joaquin Valley area for these NAAQS, the EPA will provide a full analysis to support its proposal and will provide a minimum 30-day period for public comments on that proposal, consistent with the requirements of the Administrative Procedure Act.⁶³ We respond to Earthjustice's claim that the Plan fails to include BACM and MSM in Response B.3.

Comment B.6: Earthjustice supports the EPA's proposal to disapprove the RFP and quantitative milestone elements of the SJV PM_{2.5} Plan based on the EPA's proposal to disapprove the attainment demonstration, stating that "if the plotted trajectories fail as an empirical fact to lead to attainment, they cannot reasonably be approved as meeting the Act's requirements." Earthjustice asserts that the EPA must also disapprove the RFP and quantitative milestone demonstrations due to the absence of an approved precursor demonstration and because the base year emissions inventory was developed using models that are "known to be flawed."

Response B.6: We agree with the commenter's claim that our disapproval of the attainment demonstration and precursor demonstration in the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS necessitate disapproval of the RFP and quantitative milestone elements of the Plan for these NAAQS as well. In the absence of an approved precursor demonstration, the RFP and quantitative milestone demonstrations, which address only direct PM_{2.5} and NO_x emissions, are not approvable. However, as explained in Response B.1, we disagree with the commenter's claim that the EPA must disapprove the base year emissions inventories in the SJV PM_{2.5} Plan because the State developed them using flawed models. Therefore, we disagree with the commenter's claim we must cite alleged flaws in the 2013 base year emissions inventories as an additional basis for disapproving the RFP and quantitative milestones.

⁶³ 5 U.S.C. 553(b), (c).

Comment B.7: Earthjustice states that it agrees with the EPA's proposal to disapprove the contingency measure element of the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS but asserts that there are additional fundamental flaws that the EPA did not identify in the proposal. The commenter claims that the contingency measures as submitted would not provide for one year's worth of emissions reductions, that quantification of the reductions needed to meet one year's worth of RFP is not possible in the absence of an approved attainment demonstration and accurate emissions inventory, and that the measures outlined in the plan cannot be implemented within 60 days of an EPA determination that the area failed to meet RFP or to attain by the attainment date. The commenter further asserts that the EPA should not approve a commitment to adopt additional measures or adopt a measure that consists only of enhanced enforcement as sufficient to meet contingency measure requirements. Earthjustice states that in this particular case, a commitment to enhance enforcement is "particularly egregious as a contingency measure because there is no assurance of actual emission reductions, no concrete means of enforcing th[e] commitment, and no way to suggest these emission reductions are surplus to the reductions provided by control measures already part of the attainment demonstration."

Citing its prior comments on the EPA's proposal to approve the State's attainment plan for the 2006 PM_{2.5} NAAQS in the San Joaquin Valley, Earthjustice argues that the "hot spot" approach in Rule 4901 also does not meet the basic control measure requirements of the CAA and that therefore, the State cannot expand the geographic applicability of the rule to achieve additional reductions to meet the contingency measures requirement. The commenter asserts that rather than sever the contingency measure provisions (i.e., section 5.7.3) from the rule, the EPA should partially disapprove Rule 4901 for failing to require controls on all sources.

Lastly, Earthjustice recommends that the EPA clearly state that addressing the identified deficiencies in Rule 4901 would not result in an approvable contingency measure.

Response B.7: As the commenter correctly notes, the EPA's proposal does not assess whether the amount of emissions reductions provided by the contingency measures in the SJV

PM_{2.5} Plan is sufficient because, as discussed in the EPA's proposal, it is not possible to determine whether the measures go beyond what is required for RFP or attainment purposes in the first instance, let alone whether the amount of emissions reductions from the measures is sufficient, in the absence of an approved attainment demonstration.⁶⁴ The EPA disagrees, however, with the commenter's assertion that quantification of the amount of emissions reductions needed to meet the contingency measures requirement is not possible because the emissions inventories are allegedly inaccurate. For the reasons discussed in our proposal and in Response B.1 of this notice, we have determined that the 2013 base year emissions inventories in the SJV PM_{2.5} Plan are comprehensive, accurate, current inventories of actual emissions consistent with the requirements of CAA section 172(c)(3).

Earthjustice did not explain the basis for its assertion that "[n]one of the measures outlined in the plan can be fully implemented within 60 days of" an EPA determination of failure to meet RFP or failure to attain by the attainment date. As we explained in our proposed rule, section 5.7.3 of Rule 4901 identifies a specific triggering mechanism (i.e., the EPA's final determination that the San Joaquin Valley has failed to attain the 1997 PM_{2.5} NAAQS by the applicable attainment date) and specifies a timeframe within which its requirements become effective after a failure-to-attain determination (i.e., 60 days from the effective date of the EPA's final determination), and would take effect with minimal further action by the State or the EPA.⁶⁵

As also discussed in our proposal, however, section 5.7.3 of Rule 4901 fails to satisfy the requirements for contingency measures because, among other deficiencies, it does not address three of the four required triggers for contingency measures in 40 CFR 51.1014(a), i.e., failure to meet a quantitative milestone, failure to submit a quantitative milestone report, and failure to meet an RFP requirement.⁶⁶ Because we are disapproving the contingency measure provision in

⁶⁴ 86 FR 38652, 38669.

⁶⁵ Id. Specifically, the contingency measure in Rule 4901 provides for the application of lower wood burning curtailment thresholds in certain counties "on and after sixty days following the effective date of EPA final rulemaking." Rule 4901, as amended June 20, 2019, section 5.7.3.

⁶⁶ 86 FR 38652, 38669.

Rule 4901 for the reasons provided in our proposed rule, we provide no further response to this comment.

Additionally, the commenter's statement that the EPA should not approve a commitment to adopt additional measures or enhance enforcement as sufficient to meet contingency measure requirements is outside of the scope of this rulemaking. The EPA did not propose to approve any commitments by the State or District for purposes of meeting the contingency measure requirements for the 1997 annual PM_{2.5} NAAQS. The contingency measure at issue in this rulemaking (i.e., section 5.7.3 of Rule 4901) is not a commitment to adopt an additional measure but rather has already been adopted by the State. We are disapproving this particular measure because of the deficiencies discussed in our proposed rule. Furthermore, because CARB withdrew the "State Implementation Plan Attainment Contingency Measures for the San Joaquin Valley 15 µg/m³ Annual PM_{2.5} NAAQS"⁶⁷ SIP revision that included an enhanced enforcement contingency measure, that measure is no longer before the EPA for consideration and is not at issue in this rulemaking.⁶⁸

We disagree with the commenter's claim that the District's "hot spot" approach to regulation under Rule 4901 does not meet the basic control measure requirements of the CAA and that the EPA should partially disapprove Rule 4901 for failing to require available controls on all sources in the nonattainment area, instead of merely "severing" section 5.7.3. On July 22, 2020, the EPA approved the District's June 20, 2019 revisions to Rule 4901 into the California SIP based on a determination that the rule meets the requirements of CAA sections 110(a)(2), 110(l) and 193.⁶⁹ Also on July 22, 2020, the EPA determined that Rule 4901, as amended June 20, 2019, meets the requirements for BACM/BACT and MSM for the 2006 PM_{2.5} NAAQS in the San Joaquin Valley.⁷⁰ The EPA took these actions after considering and responding to comments

⁶⁷ Letter dated October 23, 2017, from Richard W. Corey, Executive Officer, CARB, to Alexis Strauss, Acting Regional Administrator, EPA Region 9.

⁶⁸ Letter dated March 19, 2021, from Richard W. Corey, Executive Officer, CARB, to Deborah Jordan, Acting Regional Administrator, EPA Region 9, transmitting CARB Executive Order S-21-004.

⁶⁹ 85 FR 44206.

⁷⁰ 85 FR 44192.

pertaining to the District's "hot spot" approach to regulation under Rule 4901 that Earthjustice submitted during those prior rulemakings, among other comments.⁷¹ In this action, we are evaluating only the contingency measure provision in Rule 4901, section 5.7.3, for compliance with the requirements for contingency measures in CAA section 172(c)(9) and 40 CFR 51.1014. Comments pertaining to other provisions of Rule 4901 are, therefore, outside the scope of this rulemaking.

Based on the deficiencies we have identified in section 5.7.3 of Rule 4901, we are disapproving the contingency measure element of the SJV PM_{2.5} Plan, including section 5.7.3 of Rule 4901. Because section 5.7.3 of Rule 4901 is severable from the rest of the rule, we are removing it from the SIP.⁷²

Comment B.8: Earthjustice states that it agrees that the motor vehicle emissions budgets in the SJV PM_{2.5} Plan must be revised because the San Joaquin Valley area did not attain by the projected attainment date. The commenter argues that the inadequacy of the RFP and five percent annual reduction elements of the Plan also demonstrate the inadequacy of the budgets. Lastly, the commenter asserts that the budgets must be revised because they were developed using the EMFAC2014 model, which is no longer "current and accurate."

Response B.8: As discussed in our proposal, we are disapproving the motor vehicle emissions budgets in the SJV PM_{2.5} Plan because they cannot be consistent with the applicable requirements for RFP and attainment of the 1997 annual PM_{2.5} NAAQS given that we are disapproving the attainment-related elements of the Plan (including the attainment, RFP, and five percent annual reductions demonstrations).⁷³ Thus, the budgets are inadequate because they do not meet the applicable statutory and regulatory requirements.⁷⁴ We did not propose to

⁷¹ EPA Region IX, "Response to Comments Document for the EPA's Final Action on the San Joaquin Valley Serious Area Plan for the 2006 PM_{2.5} NAAQS," June 2020.

⁷² The EPA's prior incorporation of section 5.7.3 of Rule 4901 into the SIP was in error, as this specific provision is severable from the rest of the rule and the EPA did not evaluate it for compliance with the applicable CAA requirements for contingency measures. 85 FR 44206.

⁷³ 86 FR 38652, 38672.

⁷⁴ 40 CFR 93.118(e)(4)(iv).

disapprove the budgets on the basis that they were developed using EMFAC2014 because EMFAC2014 was the most current mobile source model available when the State and District were developing the SJV PM_{2.5} Plan (see Response B.1).⁷⁵ The commenter's claim that the budgets must be revised in a new plan raises issues that are outside the scope of this rulemaking. The EPA will evaluate the motor vehicle emissions budgets submitted with the State's revised Serious area and section 189(d) plan for the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley⁷⁶ and determine, through notice-and-comment rulemaking, whether the submitted budgets satisfy the applicable statutory and regulatory requirements.

Comment B.9: Earthjustice states that CARB has advised San Joaquin Valley residents that the State and District are under no obligation to implement contingency measures because the EPA has not issued a formal notice of failure to attain, and that the EPA “must direct the State and District to immediately implement additional emission reduction measures pursuant to [CAA] section 172(c)(9).” According to Earthjustice, nothing in CAA section 172(c)(9) requires a formal notice or otherwise references the finding of failure to attain mandated by section 179(c). Instead, Earthjustice claims, “the statute is clear that contingency measures must take effect ‘if the area fails . . . to attain,’ which it has as an indisputable fact, ‘without further action by the State or the Administrator.’”

Earthjustice further claims that, while a finding of failure to attain is not required to trigger contingency measures, it is a prerequisite for triggering the other consequences outlined in section 179(d). According to Earthjustice, the EPA had a statutory obligation under CAA section 179(c)(1) to determine whether or not the area attained no later than June 30, 2021, and the EPA's proposed rule satisfies the requirement in CAA section 179(c)(2) to publish notice in the *Federal Register*. Thus, Earthjustice claims, the “EPA should notify the State and District,

⁷⁵ 40 CFR 93.111(a).

⁷⁶ CARB submitted this revised plan for the 1997 annual NAAQS on November 8, 2021. Letter dated November 8, 2021, from Richard W. Corey, Executive Officer, CARB, to Deborah Jordan, Acting Regional Administrator, EPA Region 9.

and confirm with the public, that the [July 22, 2021] notice published in the Federal Register satisfied the statutory obligation in section 179(c)(2), and triggered the clocks outlined in section 179(d).” Earthjustice asserts that “[t]o conclude otherwise is to flout the statutory deadlines and the agency’s public health protection obligations.”

Response B.9: We disagree with these comments. First, the EPA has provided by rule that contingency measures for the PM_{2.5} NAAQS apply only upon a “determination” by the EPA that one of four types of failures has occurred. Specifically, 40 CFR 51.1014(a) states that contingency measures “shall take effect with minimal further action by the state or the EPA following a determination by the Administrator that the area has failed: (1) To meet any RFP requirement in an attainment plan approved in accordance with § 51.1012; (2) To meet any quantitative milestone in an attainment plan approved in accordance with § 51.1013; (3) To submit a quantitative milestone report required under § 51.1013(b); or, (4) To attain the applicable PM_{2.5} NAAQS by the applicable attainment date.” In the preamble to the PM_{2.5} SIP Requirements Rule, the EPA noted its intent “to notify the state of a failure to meet RFP or to attain the NAAQS *by publication of its determination in the Federal Register*,” after which “[t]he state should ensure that the contingency measures are fully implemented as expeditiously as practicable[.]”⁷⁷ Moreover, the EPA’s longstanding practice has been to require state and local agencies to implement contingency measures for failure to attain (“attainment contingency measures”) only after the EPA has determined, through notice-and-comment rulemaking, that the area failed to attain the NAAQS by the applicable attainment date. Thus, the EPA disagrees with the commenter’s claim that attainment contingency measures must be self-effectuating before the EPA has made a determination concerning attainment under CAA section 179(c).

Second, we disagree with Earthjustice’s claim that the EPA had a June 30, 2021 statutory deadline under CAA section 179(c)(1) to determine whether or not the San Joaquin Valley

⁷⁷ 81 FR 58010, 58066 (contingency measure requirements for Moderate PM_{2.5} nonattainment areas) and 58093 (contingency measure requirements for Serious PM_{2.5} nonattainment areas).

attained the 1997 annual PM_{2.5} NAAQS. Section 179(c)(1) of the CAA requires the EPA to determine, as expeditiously as practicable after the “applicable attainment date” for any nonattainment area but no later than six months after such date and based on the area’s air quality data as of the attainment date, whether the area attained the NAAQS by that date. The EPA has defined “applicable attainment date,” in relevant part, to mean “the latest statutory date by which an area is required to attain a particular PM_{2.5} NAAQS, unless the EPA has approved an attainment plan for the area to attain such NAAQS, in which case the applicable attainment date is the date approved under such attainment plan.”⁷⁸ Because the EPA has not yet approved an attainment plan for the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley that satisfies the requirements of CAA section 189(d), the “applicable attainment date” is the latest statutory date by which the area is required to attain the 1997 annual PM_{2.5} NAAQS.

As we explained in our October 6, 2016 proposal to find that the area had failed to attain the 1997 annual and 24-hour PM_{2.5} NAAQS, the statutory attainment date for a state subject to the requirement for a CAA section 189(d) plan for the 1997 PM_{2.5} NAAQS is set by CAA section 179(d)(3), which in turn relies upon section 172(a)(2) for the establishment of a new statutory attainment date, but with a different starting point than provided in section 172(a)(2).⁷⁹ Under section 179(d)(3), the new attainment date is the date by which the nonattainment area can attain the NAAQS as expeditiously as practicable, but no later than 5 years from the date of the final determination of failure to attain, except that the EPA may extend the attainment date for a period no greater than 10 years from the final determination, considering the severity of nonattainment and the availability and feasibility of pollution control measures.⁸⁰ The EPA’s determination that the San Joaquin Valley area failed to attain the 1997 annual PM_{2.5} NAAQS published in the *Federal Register* on November 23, 2016.⁸¹ Thus, under CAA section 179(d)(3),

⁷⁸ 40 CFR 51.1000 (definitions).

⁷⁹ 81 FR 69448, 69453-69454.

⁸⁰ *Id.*

⁸¹ 81 FR 84481.

the relevant latest statutory attainment date for purposes of the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley is November 23, 2021, except that the EPA may extend the attainment date to November 23, 2026, considering the severity of nonattainment and the availability and feasibility of pollution control measures. On November 8, 2021, the State submitted a revised attainment plan to correct the deficiencies in the SJV PM_{2.5} Plan identified in this final action. We note that the EPA may elect to approve a new attainment date that is as expeditiously as practicable, but not later than November 23, 2026, if the statutory criteria in section 172(a)(2) are met. In the meantime, the “applicable attainment date” for the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley is November 23, 2021, and the EPA does not have a mandatory duty under section 179(c)(1) to determine whether the area attained by that date until May 23, 2022.

Third, we disagree with Earthjustice’s claim that the EPA’s July 22, 2021 proposed rule constitutes a finding of failure to attain under CAA section 179(c)(2) that triggers the consequences outlined in CAA section 179(d). Section 179(d) of the CAA requires a state to submit a revised plan meeting the requirements of section 179(d)(2) “[w]ithin 1 year after the Administrator publishes the notice under [section 179(c)(2)] (relating to notice of failure to attain)....” The EPA’s proposed rule is not a final agency action and does not constitute notice of a determination under CAA section 179(c) as to whether the area attained the NAAQS. Accordingly, the proposed rule alone does not trigger any obligation on the State to submit a revised plan under CAA section 179(d). If and when the EPA takes final action to determine, through notice-and-comment rulemaking, that the San Joaquin Valley has failed to attain the 1997 annual PM_{2.5} NAAQS, that final action will, upon publication in the *Federal Register*, trigger the obligation on the State to submit a revised plan under CAA section 179(d) within one year.

Comment B.10: Earthjustice notes that the EPA outlined the sanctions consequences that would result if the proposed disapproval is finalized but asserts that the EPA did not accurately describe the status of the sanctions related to the December 2018 finding of failure to submit or

the consequences if the State were to withdraw the Plan. The commenter asserts that the EPA never made an affirmative completeness finding on the SJV PM_{2.5} Plan, that the area should therefore already be subject to offset and highway sanctions, and that withdrawal of the Plan would require immediate imposition of sanctions.

Additionally, the commenter states that it expects that the “District and State will quickly adopt a new plan, based on the defective 2013 base year inventory and outdated EMFAC2014 model, that includes no new control measures or contingency measures, and claim that its submittal should turn off sanctions” but that sanctions cannot be stayed until the EPA has affirmatively found the plan complete. Citing the EPA’s SIP Processing Manual, the commenter adds that the EPA cannot make an affirmative completeness determination if the required elements are missing or inadequate on their face.

Response B.10: The commenter’s claim that the EPA never made an affirmative completeness finding on the SJV PM_{2.5} Plan and that the area should therefore already be subject to offset and highway sanctions is incorrect. As we explained in our proposed rule, following the EPA’s December 2018 finding that the State had failed to submit a complete section 189(d) attainment plan for the 1997 annual PM_{2.5} NAAQS, among other required SIP submissions, for the San Joaquin Valley, CARB submitted the SJV PM_{2.5} Plan for these NAAQS (among other submissions) on May 10, 2019, and “[o]n June 24, 2020, the EPA issued a letter finding the [SJV PM_{2.5} Plan] complete and terminating the sanctions clocks under CAA section 179(a).”⁸² Thus, mandatory sanctions currently do not apply for purposes of the PM_{2.5} NAAQS in the San Joaquin Valley area.

We agree, however, with Earthjustice that if the State were to withdraw the SJV PM_{2.5} Plan, mandatory sanctions would apply immediately in the San Joaquin Valley, given that

⁸² 86 FR 38652, 38653-38654 (citing letter dated June 24, 2020, from Elizabeth J. Adams, Director, Air and Radiation Division, EPA Region IX, to Richard W. Corey, Executive Officer, CARB, Subject: “RE: Completeness Finding for State Implementation Plan (SIP) Submissions for San Joaquin Valley for the 1997, 2006, and 2012 Fine Particulate Matter (PM_{2.5}) National Ambient Air Quality Standards (NAAQS) and Termination of Clean Air Act (CAA) Sanctions Clocks”). The letter is available at <https://www.regulations.gov> under Docket ID No. EPA-R09-OAR-2021-0260.

withdrawal of the required SIP submission would eliminate the EPA's basis for terminating the sanctions clocks under CAA section 179(a). The EPA's December 2018 findings of failure to submit became effective on January 7, 2019, triggering clocks under CAA section 179(a) for the application of emissions offset sanctions 18 months after the finding and highway funding sanctions 6 month thereafter, unless the EPA affirmatively determines that the State has submitted a complete SIP addressing the identified deficiencies.⁸³ Because these clocks have now expired, withdrawal by the State of the SIP submission that provided the basis for the EPA's termination of the sanctions clocks would result in immediate application of mandatory sanctions under 40 CFR 52.31(d).

We do not respond to Earthjustice's additional comments regarding a new plan and related sanctions consequences as these comments are outside the scope of this rulemaking.

Comment B.11: Earthjustice states that the EPA has known since December 2018 that it had two years to promulgate a federal implementation plan (FIP), and that it was clear from available air quality data that the SJV PM_{2.5} Plan would fail to bring the San Joaquin Valley into attainment of the 1997 PM_{2.5} NAAQS by the end of 2020. And yet, according to Earthjustice, the EPA has instead focused on justifying and defending the repeated failures of the State and District. Earthjustice states that California is the only state in the nation that continues to violate ozone and particulate matter standards adopted over 20 years ago. Earthjustice notes that the EPA is already subject to a statutory deadline to promulgate a FIP, that "[i]t is beyond time for EPA to intercede and outline the elements of a FIP or SIP that would be adequate to attain the national standards," and that "Valley Residents would be more than willing to assist in that exercise." According to Earthjustice, "[a]t a minimum, such a plan would close loopholes for oil and gas operations, require real emission reductions at mobile source magnet facilities, impose meaningful controls at industrial agricultural facilities (including controls on ammonia emissions), address emissions from gas-fired appliances, and require feasible controls on wood

⁸³ Id. at 38653.

burning across the Valley.” Earthjustice urges the EPA to “use this disapproval to finally change course and direct its resources to solving, instead of excusing, the Valley’s air quality problems.”

Response B.11: As we explained in the proposed rule, as a result of the EPA’s December 6, 2018 determination, effective January 7, 2019, that California had failed to submit the required attainment plan for the 1997 annual PM_{2.5} NAAQS, among other required SIP submissions for the San Joaquin Valley, the EPA is already subject to a statutory deadline to promulgate a FIP for this purpose no later than two years after the effective date of that determination – i.e., by January 7, 2021.⁸⁴ We intend to work with the State, the District, and stakeholders in the San Joaquin Valley in the near term to either correct the deficiencies in the submitted Serious area and section 189(d) plan for the 1997 annual PM_{2.5} NAAQS or promulgate a FIP or FIPs, as appropriate and necessary to correct such deficiencies.

C. Comments from a Private Citizen

Comment C.1: The private citizen commenter⁸⁵ states that they support the EPA’s disapproval of the contingency measure element of the SJV PM_{2.5} Plan, adding that the “contingencies...ought to be triggered should the hot-spot counties of Madera, Fresno and/or Kern fail to attain any of the several National Ambient Air Quality Standards the plan seeks to address.” The commenter claims that the EPA has determined that Kern County failed to attain the 1997 annual PM_{2.5} NAAQS and that there are no adopted contingency measures in place to be triggered by the failure to attain to reduce emissions in Kern County. The commenter further asserts that the EPA does not offer a timetable for adoption of revised contingency measures. The commenter notes that the SJVUAPCD Governing Board has adopted a revised attainment plan for the 1997 annual PM_{2.5} NAAQS with a 2023 attainment date, that the EPA has proposed to extend the attainment date for the area, and that this revised plan does not contain any new control measures. The commenter recommends that the EPA specify a timeline for the State to

⁸⁴ 83 FR 62720.

⁸⁵ Comment dated August 23, 2021, from Thomas Menz, to Docket ID No. EPA-R09-OAR-2021-0260, with attachment.

submit new contingency measures, recommending that new measures are adopted before the next wood burning season. Lastly, the commenter summarizes recommendations that the EPA provided previously for the District's residential wood burning rule, and further recommends that SJVUAPCD apply the three-minute emissions opacity limit under Rule 4101 to residential wood burning.

Response C.1: The EPA appreciates these comments regarding the contingency measures in the SJV PM_{2.5} Plan. However, as explained in Response B.9, the EPA has not yet made a determination as to whether the San Joaquin Valley attained the 1997 annual PM_{2.5} NAAQS. Under CAA section 179(d)(3), the latest statutory attainment date for purposes of the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley is November 23, 2021, except that the EPA may extend the attainment date to November 23, 2026, considering the severity of nonattainment and the availability and feasibility of pollution control measures. On November 8, 2021, the State submitted a revised attainment plan to correct the deficiencies in the SJV PM_{2.5} Plan identified in this final action. We note that the EPA may approve a new attainment date extending to November 23, 2026, at the latest, if the statutory criteria in section 172(a)(2) are met. In the meantime, the "applicable attainment date" for the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley is November 23, 2021, and the EPA does not have a mandatory duty under section 179(c)(1) to determine whether the area attained by that date until May 23, 2022.

The commenter's claim that the EPA has proposed to extend the attainment date for the 1997 annual PM_{2.5} NAAQS in the San Joaquin Valley is incorrect, and comments about provisions other than section 5.7.3 in Rule 4901 are outside the scope of this rulemaking.⁸⁶

With respect to the commenter's assertion that the EPA's proposed action does not provide a timetable for the submission of new contingency measures, our proposed rule

⁸⁶ As we explained in Response B.7, the EPA previously approved Rule 4901, as amended June 20, 2019, as meeting the requirements for BACM/BACT and most stringent measures for the 2006 PM_{2.5} NAAQS (85 FR 44192) and the requirements of CAA sections 110(a)(2), 110(l) and 193 (85 FR 44206). In this action, we are evaluating only the contingency measure provision in Rule 4901, section 5.7.3, for compliance with the requirements for contingency measures in CAA section 172(c)(9) and 40 CFR 51.1014. Comments pertaining to other provisions of Rule 4901 are, therefore, outside the scope of this rulemaking.

discussed the requirement for the State to make a new SIP submission to address the identified deficiencies with respect to the attainment plan for the 1997 annual PM_{2.5} NAAQS, as well as the consequences of a final disapproval and associated timelines.⁸⁷ Upon the effective date of a final disapproval of the contingency measures, offset and highway sanctions clocks will start and sanctions will be imposed as outlined in section III of this notice, unless the State submits, and we approve, SIP revisions meeting the applicable requirements prior to implementation of the sanctions.

III. Final Action

For the reasons discussed in our proposed action and herein, the EPA is taking final action to approve in part and disapprove in part the SJV PM_{2.5} Plan for the 1997 annual PM_{2.5} NAAQS. We are approving the 2013 base year emissions inventories as meeting the requirements of CAA section 172(c)(3) and 40 CFR 51.1008. We are disapproving the precursor demonstration, five percent annual emissions reductions demonstration, BACM demonstration, attainment demonstration, RFP demonstration, quantitative milestones, motor vehicle emissions budgets, and contingency measures for failure to meet applicable CAA requirements. We are also removing from the California SIP the contingency provision of Rule 4901 (section 5.7.3) because this provision does not satisfy CAA requirements for contingency measures and is severable from the remainder of the rule.

As a result of these final disapprovals, the offset sanction in CAA section 179(b)(2) will apply in the San Joaquin Valley area 18 months after the effective date of this final action. For new or modified major stationary sources in the area, the ratio of emissions reductions to increased emissions shall be two to one. The highway funding sanctions in CAA section 179(b)(1) will apply in the area six months after the offset sanction is imposed. These sanctions will not apply if California submits, and we approve, a SIP submission or submissions meeting

⁸⁷ 86 FR 38652, 38672-38673.

the applicable CAA requirements prior to the implementation of sanctions.⁸⁸

In addition to the sanctions, CAA section 110(c)(1) provides that the EPA must promulgate a FIP addressing any disapproved elements of the attainment plan two years after the effective date of the final disapproval, unless the State submits, and the EPA approves, a SIP submission or submissions to cure the identified deficiencies. As a result of the EPA's December 6, 2018 determination, effective January 7, 2019, that California had failed to submit the required attainment plan for the 1997 annual PM_{2.5} NAAQS, among other required SIP submissions for the San Joaquin Valley,⁸⁹ the EPA is already subject to a statutory deadline to promulgate a FIP for purposes of these NAAQS no later than two years after the effective date of that determination.⁹⁰

Furthermore, upon the effective date of this final action, a conformity freeze will take effect in the San Joaquin Valley nonattainment area. A conformity freeze means that only projects in the first four years of the most recent regional transportation plan (RTP) and transportation improvement program (TIP) can proceed. During a freeze, no new RTPs, TIPs, or RTP/TIP amendments can be found to conform.⁹¹

Finally, as a result of this final action, California is required to develop and submit a revised attainment plan for the San Joaquin Valley area that addresses the applicable CAA requirements, including the Serious area plan requirements and the requirements of CAA section 189(d) for the 1997 annual PM_{2.5} NAAQS. In accordance with sections 179(d)(3) and 172(a)(2) of the CAA, the revised plan must demonstrate attainment of these NAAQS as expeditiously as practicable and no later than 5 years from the date of the EPA's prior determination that the area failed to attain (i.e., by November 23, 2021), except that the EPA may extend the attainment date to a date no later than 10 years from the date of this determination (i.e., to November 23, 2026),

⁸⁸ See 40 CFR 52.31, which sets forth in detail the sanctions consequences of a final disapproval.

⁸⁹ 83 FR 62720.

⁹⁰ Id.

⁹¹ 40 CFR 93.120(a).

considering the severity of nonattainment and the availability and feasibility of pollution control measures.⁹² We note that on November 8, 2021, California submitted a SIP revision to address the CAA requirements for the 1997 annual PM_{2.5} NAAQS. The EPA intends to evaluate and act on the revised SIP submission through subsequent rulemakings, as appropriate.

IV. Incorporation by Reference

In this document, the EPA is amending regulatory text that includes incorporation by reference. As explained in section III of this document, the EPA is removing section 5.7.3 of SJVUAPCD Rule 4901 as amended on June 20, 2019 from the California State Implementation Plan, which is incorporated by reference in accordance with the requirements of 1 CFR part 51. The EPA has made, and will continue to make, these documents available through <https://www.regulations.gov> and at the EPA Region IX Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <http://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA because this SIP disapproval does not in-and-of-itself create any new information collection burdens but simply disapproves certain state requirements for inclusion in the SIP.

⁹² 81 FR 84481, 84482 (final EPA action determining that the San Joaquin Valley had failed to attain the 1997 PM_{2.5} NAAQS by the December 31, 2015 Serious area attainment date).

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This SIP disapproval does not in-and-of itself create any new requirements but simply disapproves certain state requirements for inclusion in the SIP.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action disapproves pre-existing requirements under state or local law and imposes no new requirements. Accordingly, no additional costs to state, local, or tribal governments, or to the private sector, result from this action.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175, because the SIP revision that the EPA is disapproving would not apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction, and will not impose substantial direct costs on tribal governments or preempt tribal law. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-

202 of the Executive Order. This action is not subject to Executive Order 13045 because this SIP disapproval does not in-and-of itself create any new regulations but simply disapproves certain state requirements for inclusion in the SIP.

H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA)

Section 12(d) of the NTTAA directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. The EPA believes that this action is not subject to the requirements of section 12(d) of the NTTAA because application of those requirements would be inconsistent with the CAA.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA lacks the discretionary authority to address environmental justice in this rulemaking.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

L. Petitions for Judicial Review

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[INSERT DATE 60 DAYS AFTER THE DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action.

This action may not be challenged later in proceedings to enforce its requirements (see CAA section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Ammonia, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

AUTHORITY: 42 U.S.C. 7401 *et seq.*

Dated: November 17, 2021.

Deborah Jordan,
Acting Regional Administrator,
Region IX.

For the reasons stated in the preamble, the EPA amends Chapter I, title 40 of the Code of Federal Regulations as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

AUTHORITY: 42 U.S.C. 7401 *et seq.*

Subpart F—California

2. Section 52.220 is amended by revising paragraph (c)(535)(i)(A)(I) and adding paragraph (c)(537)(ii)(B)(5) to read as follows:

§52.220 Identification of plan—in part.

* * * * *

(c) * * *

(535) * * *

(i) * * *

(A) * * *

(I) Rule 4901, “Wood Burning Fireplaces and Wood Burning Heaters,” except section 5.7.3, amended on June 20, 2019.

* * * * *

(537) * * *

(ii) * * *

(B) * * *

(5) 2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards (“2018 PM_{2.5} Plan”), adopted November 15, 2018, portions of Appendix B (“Emissions Inventory”) pertaining to the 2013 base year emissions inventories as they relate to the 1997 annual PM_{2.5} NAAQS only.

* * * * *

4. Section 52.237 is amended by adding paragraph (a)(11) to read as follows:

§52.237 Part D disapproval.

(a) * * *

(11) The following portions of the “2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards” as they pertain to the 1997 annual PM_{2.5} standards in the San Joaquin Valley are disapproved because they do not meet the requirements of Part D of the Clean Air Act: comprehensive precursor demonstration, five percent annual emissions reductions, best available control measures/best available control technology demonstration, attainment demonstration, reasonable further progress demonstration, quantitative milestones, motor vehicle emissions budgets, and contingency measures.

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